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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/819,092	04/06/2000	Christopher Weaver	13763	5001

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EXAMINER

RAEVIS, ROBERT R

ART UNIT

PAPER NUMBER

2856

DATE MAILED: 04/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/819,092		<b>Applicant(s)</b> WEAVER, CHRISTOPHER	
	<b>Examiner</b> Robert R. Raevis		<b>Art Unit</b> 2856	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) ☒ Responsive to communication(s) filed on 07 April 2004.

2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) ☒ Claim(s) 12-31 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) ☒ Claim(s) 18-22 is/are allowed.

6) ☒ Claim(s) 12-14, 16, 17 and 23-31 is/are rejected.

7) ☒ Claim(s) 15 (allowable if written in independent format) is/are objected to.

8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
       Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
       Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
       a) ☐ All    b) ☐ Some \*    c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) <input type="checkbox"/> Notice of References Cited (PTO-892) 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6) <input type="checkbox"/> Other: _____
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### DETAILED ACTION

The first line of the first page of the written specification should refer to both the parent application, and its status.

Claims 12-14,16,20,23,26-31 are rejected under 35 U.S.C. 103(a) as obvious over Wendt.

Wendt teaches a system, including: probe 13, 15; regulating means for "isokinetic" (col. 4, line 15) controlling velocity, the regulating means including feedback 9-12; and filter 16 for capturing particulate matter. The means for generating a feedback signal includes a conduit static pressure measuring means 7 in an enclosed path 7 that passes through the same passage of flue 1 with the remaining fluid passages 8,14,15.

The written specification of Wendt does not state that the tube 7 is "closely adjacent" (Applicant's claim 12) an external surface of the probe 13, 15.

As to claims 12,16,23,26,27, as the fluid lines 7,8,14,15 all pass through the same passageway in flue 1, they are all close to one another. (As the two measuring points at the ends of tubes 7 and 8 are intended to determine velocity at the probe's inlet, those two measuring points should be close to one another, suggestive that the measuring lines are close to one another. In addition, note that line 8 is directly connected to the probe, and thus is "closely adjacent" the external surface of the probe.) As such, it would have been obvious to position the lines 7,8 close to probe line 15 because either (1) the drawing expressly suggests use of a single aperture through the flue 1 for all of the lines, suggestive that the lines are all closely adjacent, or (2) the

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static pressure line 7 must be near the inlet of line 8 to allow for both measurements at the same location to accurately determine velocity of the fluid at that same location.

As to claims 13, 14, Wendt's compressed air source (note compressed air line 20) and controllable valve 12 suggest application of a controllable pump as pumps allow for a required flow.

As to claim 20, note sensor 9.

As to claims 26-28, note the required "zero" (col. 4, line 3) pressure differential.

As to claims 29-31, note the feed back line 9-12.

Claims 12-14, 16, 17, 24, 20, 23, 25-31 are rejected under 35 U.S.C. 103(a) as obvious over Wendt in view of Huber.

Wendt teaches a system, including: probe 13, 15; regulating means for "isokinetic" (col. 4, line 15) controlling velocity, the regulating means including feedback 9-12; and filter 16 for capturing particulate matter. The means for generating a feedback signal includes a conduit static pressure measuring means 7 in an enclosed path 7 that passes through the same passage of flue 1 with the remaining fluid passages 8, 14, 15.

The written specification of Wendt does not state that the tube 7 is "closely adjacent" (Applicant's claim 12) an external surface of the probe 13, 15.

As to claims 12, 16, 17, 24, 23, 25, 26, 27, as the fluid lines 7, 8, 14, 15 all pass through the same passageway in flue 1, they are all close to one another. (As the two measuring points at the ends of tubes 7 and 8 are intended to determine velocity at the probe's inlet, those two measuring points should be close to one another, suggestive

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that the measuring lines are close to one another. In addition, note that line 8 is directly connected to the probe, and thus is "closely adjacent" the external surface of the probe.) As such, it would have been obvious to position the lines 7,8 close to probe line 15 because Huber teaches (Figure 1) that probe lines 28,38,24 are physically attached together to permit for readily mounting of the entire assembly through the same opening in a flue.

As to claims 13, 14, Wendt's compressed air source (note compressed air line 20) and controllable valve 12 suggest application of a controllable pump as pumps allow for a required flow.

As to claim 20, note sensor 9.

As to claims 26-28, note the required "zero" (col. 4, line 3) pressure differential.

As to claims 29-31, note the feed back line 9-12.

Claims 12-14,16,17,24,20,23,25,26,27-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gijutsuin (JA 54-39189) in view of Wendt.

Gijutsuin teaches an isokinetic sampling system, including: probe 4; internal 9 pressure conduit 9 in the probe 4; external 14 pressure line; flow control 6; and gauge 10 that allows for the control to create equal pressure as the two lines 9, 14. Element 3 appears to be a filter, but the CONSTITUTION does not state such. Gijutsuin's control (between elements 10 and 6) may be manual, as there is not structural connection apparent.

Gijutsuin does not employ a "regulating means", and does not use the phrase "closely adjacent" (Claim 12 of Applicant)

As to claims 12,16,25,26,29,30 static line 14 is "closely adjacent" the external surface of the probe, as the measuring points of lines 9 and 14 must test adjacent regions to assure that the comparison compares the pressures (at points 8, 13). It would have been obvious to employ a filter in Gijutsuin because Wendt teaches use of a filter 16 to sample particulates drawn in an isokinetic manner. Finally, it would have been obvious to control valve 6 in a automatic manner because Wendt teaches use of an automatic control to assure iskinetic sampling.

As to claims 13,14, elements 6 and 7 are collectively a pump in Gijutsuin.

As to claims 16,17,24,20,23, line 11 is close enough to line 8 to as assure that the differential pressure measurement 10 indicates that the pressure within line 8 is similar to that just exterior (outside) line 8, suggestive that the fluid paths are close.

As to claims 25,27-31, note that the external pressure conduit 11 is mounted to the surface of the probe 4 via support 12 so that the measured pressure in inlet 8 is compared to the static pressure immediately outside the probe. Thus, the measurement spot outside of the probe is closely adjacent the probe to an extent to allow for a proper comparison.

Claims 27,28,31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gijutsuin (JA 54-39189).

As to claims 27,28,31, note that the external pressure conduit 11 is mounted to the surface of the probe 4 via support 12 so that the measured pressure in inlet 8 is compared to the static pressure immediately outside the probe. Thus, the

measurement spot outside of the probe is closely adjacent the probe to an extent to allow for a proper comparison.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert R. Raevis whose telephone number is 703-305-4919. The examiner can normally be reached on Monday to Friday from 6:30am to 4:00pm. The fax phone number for the organization where this application or proceeding is assigned is (70

*Robert R. Raevis*

*RAEVIS*